

Date: Wednesday, 3/12/2008 1:50:54 PM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	TUBE ASSEMBLY		
Job Number	37872		Part Number	D3021041		
Estimate Number	11527		Drawing Number	D3021/D3017		
P.O. Number	:		Project Number	N/A		
This Issue	3/12/2008	S.O. No. :	Drawing Revision	A/A		
Prsht Rev.	NC		Material	:		
First Issue	/ /	Type : LARGE FAB ASSY	Due Date	4/11/2008	Qty:	1 Um: Each
Previous Run	36147					
Written By	:					
Checked & Approved By	:					
Comment	Est. 01.10.23 New Issue SM					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M4130NT0750W049	4130 Tube .750 OD x.049W Comment: Qty.: 2.1875 f(s)/Unit Total : 2.1875 f(s) 4130 Tube .750 OD x.049W Cut:- AISI 4130N tube, Ø3/4" x 0.049" wall batch: <u>M103012</u> <u>Mo8/11/03</u>
2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1 Comment: LARGE FABRICATION RESOURCE 1 1-Cut tube as per Dwg D3021 2-Drill tube as per Dwg D3021 using D3021-041T1 <u>Mo8/11/03</u> 3-Deburr
3.0	QC5	INSPECT WORK TO CURRENT STEP Comment: INSPECT WORK TO CURRENT STEP <u>Sorulof</u>
4.0	M4130NS049	4130 Sheet .049 wall Comment: Qty.: 1.0500 sf(s)/Unit Total : 1.0500 sf(s) 4130 Sheet .049 wall Cut:- AISI 4130N sheet, 18 gauge (0.050 thick) batch: Identify For D3017-11 Cap <u>Mo8/11/03</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08/11/03	4	13017-11 Qty 2 Batch #42354 perm. change	JD	08/11/03	2		John [Signature]

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 3/12/2008 1:50:54 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 37872

Part Number: D3021041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

+ Cut end caps as per Dwg D3047

MF 08/11/03

2-Weld as per Dwg D3021

A/R Steel Rod Batch: M102226

6.0 QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

RF 08/11/04 (D)

7.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/11/04 (E)

8.0 POWDER COATING

POWDER COATING



(X)

M106442

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

MF 08/11/05

9.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



MF

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-11-05 (D)

10.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: PPP41957

SS 08/11/05 (X)

11.0 QC21

FINAL INSPECTION/W/O RELEASE



08/11/05 MF

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-11-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

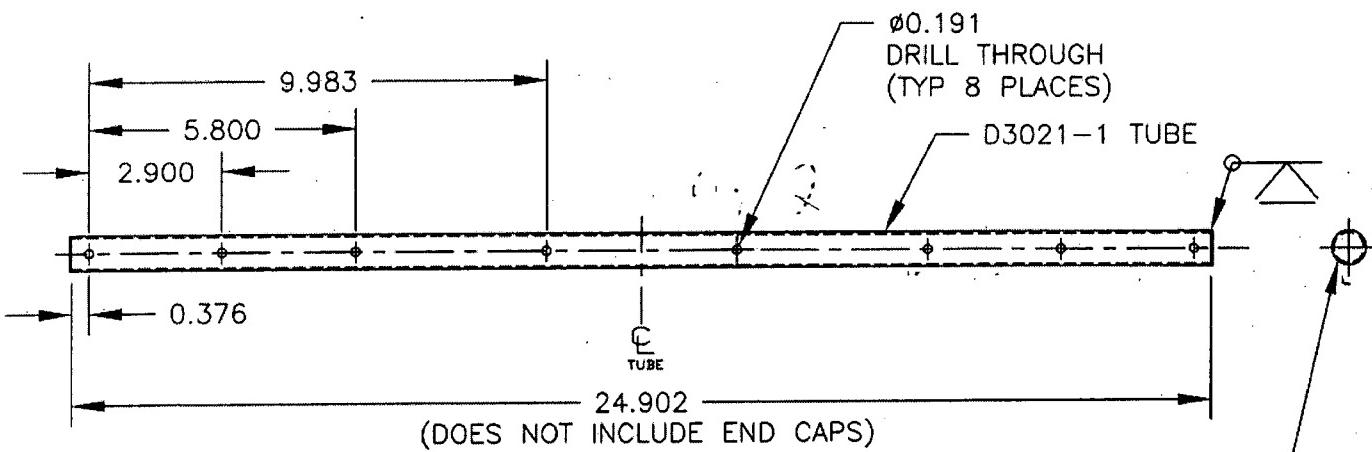
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



ISSUED
COPY

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3021 REV. A SHEET 1 OF 1
DATE		TITLE TUBE ASSEMBLY SCALE 1:4
01.05.18		
A	01.05.18	NEW ISSUE



D3021-041 TUBE ASSEMBLY
(D3021-1 TUBE)

D3017-11 END CAP COPY
(2 PLACES)
TURTO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37872

NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) MATERIAL: AISI 4130 TUBE, $\varnothing 0.75$ DIA x 0.049 WALL (M4130N-T0750W049)
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

RELEASED
01-05-2004

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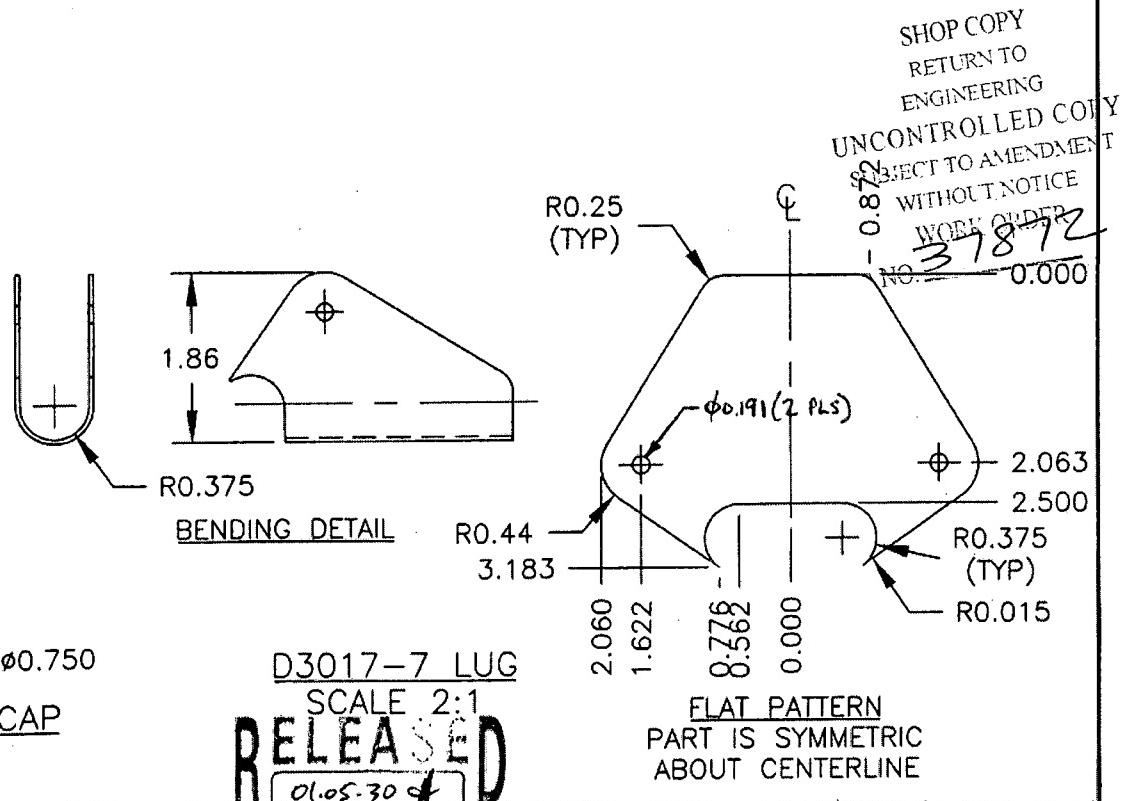


DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>✓</i>	APPROVED <i>✓</i>	DRAWING NO. D3017	REV. A SHEET 1 OF 2	
DATE 01.05.18		TITLE BACK FRAME ASSEMBLY	SCALE 1:1	
A	01.05.18	NEW ISSUE		

QTY	PART No.	DESCRIPTION	MATERIAL
X	D3017-041	BACK FRAME ASSEMBLY	N/A
1	D3017-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3017-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3017-5	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
3	D3017-7	LUG	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3017-11	END CAP	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)

NOTES

- 1) WELD PER DART QSI 004
 - 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
 - 3) FINISH: POWDER COAT GREY SANTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
 - 4) ALL DIMENSIONS ARE IN INCHES.
 - 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



D3017-11 END CAP
SCALE 1:1

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